



# CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

Company name: CRC Industries Trading (Shanghai) Co., Ltd. Product name: Electrical Silicone Lubricant

Issue date: 06-02-2016

Version #: 01

SDS No: -

## 1. Chemical product and company identification

<b>Product name</b>	<b>Electrical Silicone Lubricant</b>
<b>Product code</b>	PR02094
<b>Company name</b>	CRC Industries Trading (Shanghai) Co., Ltd.
<b>Address</b>	Room 2408, No. 488 South Wuning Road Jingan District - 200042 Shanghai, PR China
<b>Telephone</b>	
<b>General Information</b>	+86 (0) 21 6236 6035
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<b>Website</b>	www.crcindustries.cn

### Recommended use and Limitations on use

<b>Recommended use</b>	Electrical silicone lubricant
<b>Issue date</b>	06-02-2016

## 2. Hazards identification

<b>Emergency overview</b>	Aerosol. Pressurized container may explode when exposed to heat or flame. May be fatal if swallowed and enters airways. May be harmful in contact with skin. Causes skin irritation. Possible risk of impaired fertility. Possible risk of harm to the unborn child. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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### GHS-classification

<b>Physical hazards</b>	Aerosols	Category 1
<b>Health hazards</b>	Acute toxicity, dermal	Category 5
	Skin corrosion/irritation	Category 2
	Reproductive toxicity (fertility, the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure (inhalation)	Category 2 (nervous system)
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
<b>Other hazards which do not result in classification</b>	Not classified.	

### Label elements

#### Pictograms



### GHS-labeling

**Signal word** Danger

<b>Hazard statement</b>	Extremely flammable aerosol. Pressurized container: May burst if heated. May be fatal if swallowed and enters airways. May be harmful in contact with skin. Causes skin irritation. May cause drowsiness or dizziness. May cause damage to organs (nervous system) through prolonged or repeated exposure by inhalation. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe mist or vapor. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.
<b>Response</b>	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention. Collect spillage.
<b>Storage</b>	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national regulations.
<b>Physical and chemical hazards</b>	Extremely flammable aerosol. Pressurized container: May burst if heated.
<b>Health hazards</b>	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. May be harmful if absorbed through skin. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. May be fatal if swallowed and enters airways. Headache. Nausea, vomiting. Causes skin irritation. Direct contact with eyes may cause temporary irritation. Suspected of damaging fertility or the unborn child.
<b>Environmental hazards</b>	Toxic to aquatic life with long lasting effects.

### 3. Composition/information on ingredients

Substance/mixture	Mixture	
Chemical name	CAS Number	Concentration (%)
naphtha (petroleum), hydrotreated light	64742-49-0	40 - 50
2-methylpentane	107-83-5	20 - 30
liquefied petroleum gas	68476-86-8	20 - 30
n-hexane	110-54-3	3 - 5
polydimethylsiloxane	63148-62-9	3 - 5

### 4. First aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis.
<b>Most important symptoms and health effects</b>	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain. Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects.
<b>Expected acute symptoms and delayed symptoms</b>	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain. Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects.
<b>Personal protection for first-aid responders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
<b>Notes to physician</b>	Provide general supportive measures and treat symptomatically. Treat symptomatically. Keep victim under observation. Symptoms may be delayed. Keep victim warm.

### 5. Fire-fighting measures

<b>Extinguishing media</b>	Alcohol resistant foam. Water. Water spray. Dry powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Extinguishing media to avoid</b>	Do not use water jet as an extinguisher, as this will spread the fire.

<b>Specific hazards</b>	Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged.
<b>Special fire fighting procedures</b>	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. In the event of fire, cool tanks with water spray.
<b>Protection of fire-fighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>General fire hazards</b>	Extremely flammable aerosol.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Avoid release to the environment.
<b>For emergency responders</b>	Wear appropriate protective equipment and clothing during clean-up. Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground.
<b>Clean-up methods and materials and containment measures</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Use water spray to reduce vapors or divert vapor cloud drift. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Prevention of secondary hazards</b>	None known.

## 7. Handling and storage

<b>Handling</b>	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Static electricity and formation of sparks must be prevented. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Wear appropriate personal protective equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wash hands thoroughly after handling. Avoid release to the environment.
<b>Storage</b>	Level 3 Aerosol.  Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Keep away from heat, sparks and open flame. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS). Store in a well-ventilated place.

## 8. Exposure controls/personal protection

### Exposure limits

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007)

Components	Type	Value
n-hexane (CAS 110-54-3)	PC-STEL	180 mg/m3
	PC-TWA	100 mg/m3

### Biological limit values

China. Biological limit values for occupational exposure (WS/T 110 to 115, 239 to 243, and 264 to 267)

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	4 mg/l	2,5-Hexanedione	Urine	*
	35 mmol/l	2,5-Hexanedione	Urine	*

\* - For sampling details, please see the source document.

**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedion, without hydrolysis	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007): Skin designation**

N-HEXANE (CAS 110-54-3)

Can be absorbed through the skin.

**Control parameters**

Follow standard monitoring procedures.

**Engineering measures**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Personal protective equipment****Respiratory protection**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Hand protection**

Polyvinyl chloride (PVC). Viton®. Wear protective gloves such as: Nitrile.

**Eye protection**

Wear safety glasses with side shields (or goggles).

**Skin and body protection**

Wear appropriate chemical resistant clothing.

**Hygiene measures**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance****Physical state**

Liquid.

**Form**

Aerosol.

**Color**

Clear water-white.

**Odor**

Mild solvent.

**pH**

Not available.

**Melting point/freezing point**

Not available.

**Boiling point, initial boiling point, and boiling range**

118.4 °F (48 °C) estimated

**Flash point**

&lt; 0 °F (&lt; -17.8 °C) Tag Closed Cup

**Flammability limit - lower (%)**

1 % estimated

**Flammability limit - upper (%)**

8 % estimated

**Explosive limit - lower (%)**

1 % estimated

**Explosive limit - upper (%)**

8 % estimated

**Vapor pressure**

1577.3 hPa estimated

**Vapor density**

&gt; 1 (air = 1)

**Relative density**

0.81 estimated

**Density**

5.8 lbs/gal estimated

**Solubility(ies)****Solubility (water)**

Negligible.

**Partition coefficient (n-octanol/water)**

Not available.

**Auto-ignition temperature**

437 °F (225 °C) estimated

**Decomposition temperature**

Not available.

**Evaporation rate**

Fast.

**Other data****Percent volatile**

97 % estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, flames and sparks. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Chlorine.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

<b>Acute toxicity</b>	May be harmful in contact with skin. May be fatal if swallowed and enters airways.	
<b>Product</b>	<b>Species</b>	<b>Test Results</b>
Electrical Silicone Lubricant		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	3460 mg/kg estimated
<b>Inhalation</b>		
LC50	Rat	58297 ppm, 4 hours estimated 55 mg/l, 4 hours estimated
<b>Oral</b>		
LD50	Rat	6980 mg/kg estimated
<b>Routes of exposure</b>	Inhalation. Ingestion. Skin contact. Eye contact.	
<b>Symptoms</b>	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain. Direct contact with eyes may cause temporary irritation.	
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>Toxic to reproduction</b>	Suspected of damaging fertility or the unborn child.	
<b>Specific target organ toxicity following single exposure</b>	May cause drowsiness and dizziness.	
<b>Specific target organ toxicity following repeated exposure</b>	May cause damage to organs (nervous system) through prolonged or repeated exposure by inhalation.	
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.	
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects.	
	Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.	

## 12. Ecological information

<b>Ecotoxicological data</b>			
<b>Components</b>	<b>Species</b>	<b>Test Results</b>	
n-hexane (CAS 110-54-3)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
polydimethylsiloxane (CAS 63148-62-9)			
<b>Aquatic</b>			
Fish	LC50	Channel catfish (Ictalurus punctatus)	2.36 - 4.15 mg/l, 96 hours

<b>Ecotoxicity</b>	Toxic to aquatic life with long lasting effects.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulation</b>	No data available.

**Bioaccumulative potential****Octanol/water partition coefficient log Kow**

2-methylpentane	3.74
n-hexane	3.9

<b>Mobility in soil</b>	This product is miscible in water.
<b>Other hazardous effects</b>	None known.

**13. Disposal considerations**

<b>Residual waste</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.
<b>Local disposal regulations</b>	Dispose of contents/container in accordance with local/regional/national/international regulations. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

**14. Transport information****CNDG**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS
<b>Transport hazard class(es)</b>	
<b>Class</b>	2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	-

**IATA**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	10L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

**IMDG**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS, LIMITED QUANTITY
<b>Transport hazard class(es)</b>	
<b>Class</b>	2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-D, S-U
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**CNDG; IATA; IMDG****15. Regulatory information****Inventory of Existing Chemical Substances in China**

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**Applicable regulations**

This safety data sheet conforms to the following laws, regulations and standards:

Regulations on the Control over Safety of Dangerous Chemicals

Regulations on Labor Protection in Workplaces Where Toxic Products Are Used

Measures for the Safe Use of Chemicals in Workplaces

Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)

General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009 )

Packing Symbol of Dangerous Goods(GB190-2009)

Packing - Pictorial Marking for Handling of Goods (GB/T191-2009)

**General Rule For Classification and Hazard Communication of Chemicals (GB 13690-2009) and Catalog of Hazardous Chemicals**

2-methylpentane (CAS 107-83-5)

n-hexane (CAS 110-54-3)

**Occupational exposure limits for hazardous agents in the workplace (GBZ 2.1-2007)**

n-hexane (CAS 110-54-3)

**Restricted Import/Export Toxic Chemical List (MEP and GCA Announcement No. 2008-66, Dec. 1, 2008, amended through MEP and Customs Notice No. 2013-85, December 30, 2013)**

Not regulated.

**Identification of Major Hazard Installations for Hazardous Chemicals (GB18218-2009)**

n-hexane (CAS 110-54-3)

**Classification and code of dangerous goods (GB 6944-2012)**

Regulated.

**List of Dangerous Goods (GB 12268-2005)**

Regulated.

**The Principle of Classification of Transport Packaging Groups of Dangerous Goods (GB/T15098-2008)**

Regulated.

**General Specifications for Transport Packages of Dangerous Goods (GB 12463-2009)**

Regulated.

**Regulations on Road Transport of Dangerous Goods**

Regulated.

**Regulations on Rail Road Transport of Dangerous Goods**

Regulated.

**UN Recommendations on the Transport of Dangerous Goods (UN RTDG)**

Regulated.

**16. Other information**

<b>References</b>	Not available.
<b>Further information</b>	CRC # 519A-D
<b>Disclaimer</b>	CRC Industries Trading (Shanghai) Co., Ltd. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.